

NEW NAMES AND COMBINATIONS, PRINCIPALLY IN THE ROCKY MOUNTAIN  
FLORA--III

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**AQUILEGIA MICRANTHA** f. **MANCOSANA** (Eastwood) W. A. Weber,  
**comb. nov.** *A. micrantha* var. *mancosana* Eastw., Proc. Calif. Acad.  
(3) Bot. 1:77. 1897.

**ASTRAGALUS KENTROPHYTA** ssp. **COLORADOENSIS** (Jones) W. A.  
Weber, **comb. nov.** *A. kentrophyta* var. *coloradoensis* Jones, Con-  
trib. W. Bot. 10:63. 1902.

**ASTRAGALUS KENTROPHYTA** ssp. **DANAUS** (Barneby) W. A. Weber,  
**comb. nov.** *A. tegetarius* var. *danaus* Barneby, Lfl. W. Bot. 5:95.  
1951.

**ASTRAGALUS KENTROPHYTA** ssp. **DOUGLASII** (Barneby) W. A. Weber,  
**comb. nov.** *A. kentrophyta* var. *douglasii* Barneby, Mem. N. Y. Bot.  
Gard. 13:364. 1964.

**ASTRAGALUS KENTROPHYTA** ssp. **ELATUS** (S. Wats.) W. A. Weber,  
**comb. nov.** *A. kentrophyta* var. *elatus* S. Wats., Bot. King's Ex-  
ped. 77. 1871.

**ASTRAGALUS KENTROPHYTA** ssp. **IMPLEXUS** (Canby ex Porter & Coul-  
ter) W. A. Weber, **comb. nov.** *A. tegetarius* var. *implexus* Canby ex  
Porter & Coulter, Syn. Fl. Colo., Add. 1874.

**ASTRAGALUS KENTROPHYTA** ssp. **JESSIAE** (Peck) W. A. Weber,  
**comb. nov.** *A. jessiae* Peck, Lfl. W. Bot. 4:180. 1945.

**ASTRAGALUS KENTROPHYTA** ssp. **NEOMEXICANUS** (Barneby) W. A.  
Weber, **comb. nov.** *A. tegetarius* var. *neomexicanus* Barneby, Lfl.  
W. Bot. 6:99. 1951.

**ASTRAGALUS KENTROPHYTA** ssp. **UNGULATUS** (Jones) W. A. Weber,  
**comb. nov.** *A. kentrophyta* var. *ungulatus* Jones, Proc. Calif.  
Acad. Sci. II, 5: 650. 1895.

**BRICKELLIA ROSMARINIFOLIA** (Vent.) W. A. Weber, **comb. nov.**  
*Kuhnia rosmarinifolia* Vent., Descr.... Cels. t. 91. 1803.

**BRICKELLIA ROSMARINIFOLIA** ssp. **CHLOROLEPIS** (Woot. & Standl.)  
W. A. Weber, **comb. nov.** *Kuhnia chlorolepis* Woot. & Standl.,  
Contrib. U. S. Nat. Herb. 16:177. 1913.

**BRICKELLIA MICROPHYLLA** ssp. **SCABRA** (A. Gray) W. A. Weber,  
**comb. nov.** *Brickellia microphylla* var. *scabra* A. Gray, Proc.  
Amer. Acad. 11:74 (1875-6).

**CERASUS PUMILA** (L.) Michx. ssp. **BESSEYI** (L. H. Bailey) W. A.  
Weber, **comb. nov.** *Prunus besseyi* L. H. Bailey, Bull. Cornell  
Univ. Exp. Sta. 70:261. t.1. 1894.

**GERANIUM CAESPITOSUM** ssp. **ATROPURPUREUM** (Heller) W. A.  
Weber, **comb. nov.** *Geranium atropurpureum* Heller, Bull. Torr.  
Bot. Club 23:1965. 1898.

HIRCULUS PLATYSEPALUS (Trautv.) W. A. Weber, **comb. nov.** Saxifraga flagellaris var. platysepala Trautv., Fl. Taimyr, p. 43. 1856.

HIRCULUS PLATYSEPALUS ssp. CRANDALLII (Gand.) W. A. Weber, **comb. nov.** Saxifraga crandallii Gand., Bull. Soc. Bot. France 65:30. 1918.

HIRCULUS SERPYLLIFOLIUS (Pursh) W. A. Weber, **comb. nov.** Saxifraga serpyllifolia Pursh, Fl. Amer. Sept. 1:311. 1814.

HIRCULUS SERPYLLIFOLIUS ssp. CHRYSANTHUS (A. Gray) W. A. Weber, **comb. nov.** Saxifraga chrysantha A. Gray, Proc. Amer. Acad. 12:83. 12887.

PEDICULARIS BRACTEOSA ssp. PAYSONIANA (Pennell) W. A. Weber, **comb. nov.** Pedicularis paysoniana Pennell, Bull. Torr. Bot. Club 6:46. 1934.

PEDIOMELUM AROMATICUM (Payson) W. A. Weber, **comb. nov.** Psoralea aromatica Payson, Bot. Gaz. 60:379. 1915. The genus Psoralea is typified by a South African shrub with linear, acicular leaves. Rydberg (1919), in my opinion, was quite correct in segregating out the North American taxa into a number of genera which, geographically, ecologically and morphologically stand very clearly as discrete groups.

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The American species of Crepis were treated in a now classic monograph by Babcock & Stebbins (Carnegie Inst. Wash. Publ. 504. 1938. The authors seem to have been preoccupied with the species alone, and unfortunately they did not discuss the significance of their cytological findings as having a bearing on the generic level, even though Nuttall (1841) had proposed the name Psilochenia for the American species.

All of the native American species of Crepis, with the exception of two Old World species (C. elegans and C. nana), representing an ancient Tertiary extension of the genus onto western North America, have the chromosome base number  $x=11$ . "This is in striking contrast to the Old World species of Crepis, whose basic haploid numbers range from  $x=3$  to  $x=7$ , 4 and 5 being much the most common" (Babcock & Stebbins, *op. cit.*). The authors went on to postulate that the American species may have arisen by amphidiploidy from a cross involving Crepis species with  $x=4$  and  $x=7$ . Whether or not this can ever be substantiated, the fact remains that the American species of Crepis form an indisputably monophyletic line, spatially and genetically isolated from the Old World species.

Recently Love (1982, p. 360) transferred Crepis runcinata to Nuttall's genus Psilochenia because of this evidence, but among the rest of the species, only the type, Psilochenia occidentalis Nuttall, has a name in that genus. The following combinations are needed.

PSILOCHENIA ACUMINATA (Nutt.) W. A. Weber, **comb. nov.** Crepis acuminata Nutt., Trans. Am. Phil. Soc., n.s. 7:437. 1841.

PSILOCHENIA ACUMINATA ssp. PLURIFLORA (Babc. & Stebb.) W. A. Weber, **comb. nov.** Crepis acuminata ssp. pluriflora Babc. & Stebb., Carn. Inst. Wash. Publ. 504:178. 1938.

- PSILOCHENIA ATRIBARBA (Heller) W. A. Weber, **comb. nov.** Crepis atribarba Heller, Bull. Torr. Bot. Club 26:314. 1899.
- PSILOCHAENIA ATRIBARBA ssp. CYTOTAXONOMICORUM (Boivin) W. A. Weber, **comb. nov.** Crepis atribarba var. cytotaxonomicorum Boivin, Nat. Canad. 87:31. 1960.
- PSILOCHENIA BAKERI (Greene) W. A. Weber, **comb. nov.** Crepis bakeri Greene, Erythea 3:73. 1895.
- PSILOCHENIA BAKERI ssp. CUSICKII (Eastw.) W. A. Weber, **comb. nov.** Crepis cusickii Eastw., Bull. Torr. Bot. Club 30:503. 1903.
- PSILOCHENIA BAKERI ssp. IDAHOENSIS (Babc. & Stebb.) W. A. Weber, **comb. nov.** Crepis bakeri ssp. idahoensis Babc. & Stebb., Carneg. Inst. Wash. Bull. 504:141. 1938.
- PSILOCHENIA INTERMEDIA (A. Gray) W. A. Weber, **comb. nov.** Crepis intermedia A. Gray, Syn. Fl. 1(2):432. 1884.
- PSILOCHENIA MODOCENSIS (Greene) W. A. Weber, **comb. nov.** Crepis modocensis Greene, Erythea 3:48. 1895.
- PSILOCHENIA MODOCENSIS ssp. GLAREOSA (Piper) W. A. Weber, **comb. nov.** Crepis glareosa Piper, Bull. Torr. Bot. Club 28:42. 1901.
- PSILOCHENIA MODOCENSIS ssp. ROSTRATA (Coville) W. A. Weber, **comb. nov.** Crepis rostrata Coville, Contr. U. S. Nat. Herb. 3:564. 1896.
- PSILOCHENIA MODOCENSIS ssp. SUBACAULIS (Kellogg) W. A. Weber, **comb. nov.** Crepis occidentalis var. subacaulis Kellogg, Proc. Calif. Acad. 5:50. 1873.
- PSILOCHENIA MONTICOLA (Coville) W. A. Weber, **comb. nov.** Crepis monticola Coville, Contr. U. S. Nat. Herb. 3:562. 1896.
- PSILOCHENIA OCCIDENTALIS ssp. CONJUNCTA (Jeps.) W. A. Weber **comb. nov.** Crepis occidentalis ssp. conjuncta Jeps. ex Babc. & Stebb., Carneg. Inst. Wash. Bull. 504:134. 1938.
- PSILOCHENIA OCCIDENTALIS ssp. COSTATA (A. Gray) W. A. Weber, **comb. nov.** Crepis occidentalis var. costata A. Gray, Bot. Calif. 1:435. 1876.
- PSILOCHENIA OCCIDENTALIS ssp. PUMILA (Rydb.) W. A. Weber, **comb. nov.** Crepis pumila Rydb., Mem. N. Y. Bot. Gard. 1:462. 1900.
- PSILOCHENIA PLEUROCARPA (A. Gray) W. A. Weber, **comb. nov.** Crepis pleurocarpa A. Gray, Proc. Amer. Acad. 17:221. 1882.
- PSILOCHENIA RUNCINATA ssp. ANDERSONII (A. Gray) W. A. Weber, **comb. nov.** Crepis runcinata ssp. andersonii A. Gray, Proc. Am. Acad. 6:553. 1865.
- PSILOCHENIA RUNCINATA ssp. BARBERI (Greenm.) W. A. Weber, **comb. nov.** Crepis barberi Greenm., Proc. Am. Acad. 40:52. 1904.
- PSILOCHENIA RUNCINATA ssp. GLAUCA (Nutt.) W. A. Weber, **comb. nov.** Crepidium glaucum Nutt., Trans. Am. Phil. Soc., n.s. 7:436. 1841.
- PSILOCHENIA RUNCINATA ssp. HALLII (Babc. & Stebb.) W. A. Weber, **comb. nov.** Crepis runcinata ssp. hallii Babc. & Stebb., Carn. Inst. Wash. Bull. 504:104. 1938.
- PSILOCHENIA RUNCINATA ssp. HISPIDULOSA (Howell) W. A. Weber, **comb. nov.** Crepis runcinata var. hispidulosa Howell, Mem. N. Y. Bot. Gard. 1:461. 1900.

PSILOCHENIA RUNCINATA ssp. IMBRICATA (Babc. & Stebb.) W. A. Weber, **comb. nov.** Crepis runcinata ssp. imbricata Babc. & Stebb., Carn. Inst. Wash. Bull. 504:102. 1938.

SENECIO FREMONTII T. & G. ssp. BLITOIDES (Greene) W. A. Weber, **comb. nov.** Senecio blitoides Greene, Pittonia 4:123. 1900.

TEUCRIUM CANADENSE L. ssp. OCCIDENTALE (A. Gray) W. A. Weber, **comb. nov.** Teucrium occidentale A. Gray, Syn. Fl. N. Am. 2:349. 1878.

WYETHIA X MAGNA A. Nels., **hybr. nov.** Putative hybrid, Wyethia amplexicaulis (Nutt.) Nutt. X Wyethia arizonica A. Gray. TYPUS: COLORADO, U.S.A. Routt Co.: Elk River, high mountain slopes, L. N. Goodding 1664 (RM 52083).

Wyethia amplexicaulis ranges widely through northwestern United States, entering Colorado as a pure population in the northwesternmost counties. Wyethia arizonica occupies the southwestern United States, reaching Colorado in the Four Corners area. Occupying large areas of the western Colorado plateaus is a population of plants which, because of their large stature and similar gross morphology would be called W. amplexicaulis except that the plants are not glabrous but are densely pubescent. Aven Nelson applied the manuscript name, W. magna to such plants. In the northern counties, W. X magna and W. amplexicaulis both occur with intermediates having variable pubescence. In the southwest corner of Colorado, typical W. arizonica occurs along with a plant somewhat larger but more glabrate, in an obvious hybrid swarm. It is noteworthy that plants leaning toward the morphology of W. amplexicaulis are frost hardy compared to W. arizonica (Weber 1952).

Over the major part of western Colorado, however, a population is widespread which seems to be a stable hybrid having the habit and detailed morphology of W. amplexicaulis, differing only in the copious pubescence on all parts. Since these plants continue to be the subject of inquiry by collectors, it seems appropriate to provide a name for them.

#### LITERATURE CITED

Babcock, E. B., & G. L. Stebbins, Jr. 1938. The American species of Crepis. Carnegie Inst. of Washington Publ. 504. 199 pages.

Love, Askeell. 1982. IOPB chromosome number reports LXXX. Taxon 31:342-368.

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Rydberg, Per Axel. 1919. (Rosales) Fabaceae: Psoraleae, in North American Flora 24(I):1-25.

Weber, William A. 1952. The glabrate form of Wyethia arizonica. Lfl. W. Bot. 6:223-225.